

Application No. 10/775,429

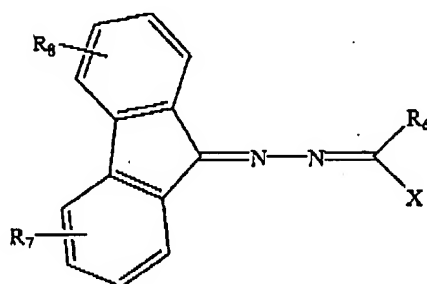
AMENDMENTS TO THE SPECIFICATIONIn the Specification

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Please substitute the following amended paragraph(s) and/or section(s) (deleted matter is shown by strikethrough and added matter is shown by underlining):

Page 21, lines 12-25

In some embodiments, the organophotoreceptor may comprise a charge transport material having the formula

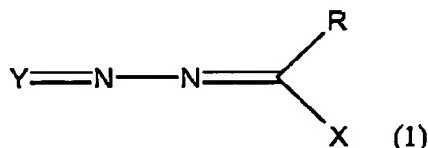


where X comprises an arylamine group such as a p-(N,N-disubstituted)arylamine group, a carbazole group, or a julolidine group; R<sub>6</sub> comprises a hydrogen, an alkyl group, an alkenyl group, a heterocyclic group, or an aromatic group; R<sub>7</sub> comprises a -(CH<sub>2</sub>)<sub>n</sub>H group where n is an integer between 1 and 50, and one or more of the methylene groups is optionally replaced by O, S, [[B, P,]] C=O, O=S=O, a heterocyclic group, an aromatic group, an NR<sub>a</sub> group, a CR<sub>c</sub>R<sub>d</sub> group, or a SiR<sub>e</sub>R<sub>f</sub> where R<sub>a</sub>, R<sub>c</sub>, R<sub>d</sub>, R<sub>e</sub>, and R<sub>f</sub> are, each independently, H, a hydroxyl group, a thiol group, a carboxyl group, an amino group, an alkyl group, an alkoxy group, an alkenyl group, a heterocyclic group, an aromatic group, or part of a ring group; and R<sub>8</sub> comprises a hydrogen, a halogen, a NO<sub>2</sub> group, a cyano group, a hydroxyl group, a thiol group, a carboxyl group, an amine group, an ester group having the formula COOR where R is an alkyl group, an alkenyl group, or an aromatic group, an alkyl group, an alkoxy group, an alkenyl group, or an aromatic group.

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**Page 3, lines 1-15**

In a first aspect, the invention pertains to an organophotoreceptor comprising an electrically conductive substrate and a photoconductive element on the electrically conductive substrate, the photoconductive element comprising: a) a charge transport material having the following formula:



where R comprises a hydrogen, an alkyl group, an alkenyl group, a heterocyclic group, or an aromatic group; X comprises an arylamine group such as a p-(N,N-disubstituted)arylamine group, a carbazole group, or a julolidine group; and Y comprises a 9-fluorenylidene group having at least a solubilizing substituent comprising a  $-(\text{CH}_2)_n\text{H}$  group where n is an integer between 1 and 50, and one or more of the methylene groups is optionally replaced by O, S, [[B, P,]] C=O, O=S=O, a heterocyclic group, an aromatic group, an  $\text{NR}_a$  group, a  $\text{CR}_b\text{R}_d$  group, or a  $\text{SiR}_c\text{R}_f$  where  $\text{R}_a$ ,  $\text{R}_b$ ,  $\text{R}_d$ ,  $\text{R}_c$ , and  $\text{R}_f$  are, each independently, H, a hydroxyl group, a thiol group, a carboxyl group, an amino group, an alkyl group, an alkoxy group, an alkenyl group, a heterocyclic group, an aromatic group, or part of a ring group; and

(b) a charge generating compound.

**Page 8, line 21 –page 9, line 12**

The 9-fluorenylidene group has at least a solubilizing substituent comprising a  $-(\text{CH}_2)_n\text{H}$  group where n is an integer between 1 and 50, and one or more of the methylene groups is

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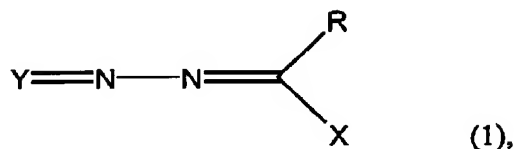
optionally replaced by O, S, [[B, P,]] C=O, O=S=O, a heterocyclic group, an aromatic group, an NR<sub>a</sub> group, a CR<sub>c</sub>R<sub>d</sub> group, or a SiR<sub>e</sub>R<sub>f</sub> where R<sub>a</sub>, R<sub>c</sub>, R<sub>d</sub>, R<sub>e</sub>, and R<sub>f</sub> are, each independently, H, a hydroxyl group, a thiol group, a carboxyl group, an amino group, an alkyl group, an alkoxy group, an alkenyl group, a heterocyclic group, or an aromatic group, or part of a ring group. The compatibility of a charge transport material with a particular binder can be estimated based on the difference between their Hildebrand solubility parameter values. If the difference is zero or small ( $\leq 5.0 \text{ MPa}^{1/2}$ ), the charge transport material will be compatible with the binder. However, if the difference is large (e.g.  $> 5.0 \text{ MPa}^{1/2}$ ), the charge transport material may not be compatible with the binder. The calculation of Hildebrand solubility parameter can be found in Polymer Handbook, 3rd Ed., J. Brandrup & E.H. Immergut, John Wiley, NY, p. VII/522 (1989), incorporated herein by reference. The Hildebrand solubility parameters of the solubilizing substituent may be adjusted by replacing one or more of the methylene groups with other groups, such as those listed above. In general, solubilizing substituents with a wide range of Hildebrand solubility parameter may be formed by such a technique. In some embodiments, two adjacent methylene groups are replaced by an O atom and a C=O group to form an ester group. In other embodiments, two adjacent methylene groups are replaced by an NR<sub>1</sub> group and a C=O group to form an amide group. In further embodiments, two adjacent methylene groups are replaced by two CR<sub>2</sub> group to form an alkenyl solubilizing substituent.

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Page 20, line 23-page 21, line 6

Charge Transport Material

As described herein, an organophotoreceptor comprises a charge transport material having the formula



where R comprises a hydrogen, an alkyl group, an alkenyl group, a heterocyclic group, or an aromatic group; X comprises an arylamine group such as a p-(N,N-disubstituted)arylamine group, a carbazole group, or a julolidine group; and Y comprises a 9-fluorenylidene group having at least a solubilizing substituent comprising a  $-(\text{CH}_2)_n\text{H}$  group where n is an integer between 1 and 50, and one or more of the methylene groups is optionally replaced by O, S, [[B, P,]] C=O, O=S=O, a heterocyclic group, an aromatic group, an  $\text{NR}_a$  group, a  $\text{CR}_c\text{R}_d$  group, or a  $\text{SiR}_e\text{R}_f$  where  $\text{R}_a$ ,  $\text{R}_c$ ,  $\text{R}_d$ ,  $\text{R}_e$ , and  $\text{R}_f$  are, each independently, H, a hydroxyl group, a thiol group, a carboxyl group, an amino group, an alkyl group, an alkoxy group, an alkenyl group, a heterocyclic group, or an aromatic group, or part of a ring group.